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| Breakout 6: Day Thursday (before Lunch): Connecting Our Learning | |  |
| 105 min | Math Learning Goals  Participants will:   * Understand the use of number line activities to from whole number to fractional thinking * Recognize how the number line is different from other fractional representations and its advantages * Understand the importance of the number line and how understanding its structure * Recognize the advantages that can be gained by using the number line | Materials   * Adding machine tape * Stickers * Markers |
|  | Whole Group 🡪 Whole number thinking on number lines  Human Number Line: One person is 0 and the other person is 10. Someone stands where 5 would be. Someone stands where 3 would be. Change the end point to 12. Where would 5 be now?  Think/Pair/Share – Whole Discussion – Value Line  What does this activity have to do with fractions? (Nothing to Everything) People place themselves on a value line to answer this question. They then discuss this concept with their neighbours to ensure that they are correctly placed on the line  Now change the endpoints to 0 and 1. Have a person have stand where one half is, one fourth, three fourths is. Have a mystery person stand somewhere on the line while the rest figure out what fraction is being represented. |  |
| Minds On…  15 minutes |
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|  | Pairs🡪Fractional Thinking on Number Lines Using Adding Machine Tape  Each pair gets a piece of adding tape (different lengths) and pretends one end is 0 and the other end is 1. They fold paper half and then fourths and label the fractions. Discuss why they are different. They get a new piece of tape for thirds and are challenged with: What is a good strategy for folding into thirds? What happens if we folded it in half again?  Working with a partner, estimate where ½, ¼, 2/3 would be on their bodies and mark with a sticker. Participants get a piece of adding tape the same size as themselves. By folding the tape, they verify whether predictions are correct.  **Extension**  Participants can estimate the fraction that would represent where their knees are, eyes are etc. and explain why they think so.  Check for Understanding  Pose the problem, "One person hiked two-thirds of the way on the trail, the other person hiked two-fourths of the way. Who hiked the further distance?" |  |
| Action! |
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|  | Individual 🡪 Check for Understanding  **Reflection:**  On the back of their number lines, participants answer the following questions and then put the number lines in their treasure chests.  1. What are some pluses of using the number line when dealing with fractions?  2. What mathematical concepts can be reinforced by using the number line?  (temperature on thermometers, measurement, historic timelines)  Or reflect on the quote: "Learning is a treasure that will follow its owner everywhere" – Chinese Proverb |  |
| Consolidate Debrief |
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